Receipt date: 08/04/



PATENT APPLICATION

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Susumu NODA et al.

Application No.: 10/584,942 /

Filed: July 5, 2006

Docket No.: 126785

For:

PHOTONIC CRYSTAL HAVING HETERO STRUCTURE AND OPTICAL DEVICE

USING THE PHOTONIC CRYSTAL

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- 2. Relevance of one or more non-English language reference is discussed in the present specification. See References 21, 23 and 30.
- 3. One or more reference cited herein was cited in the International Search Report. A copy of the International Search Report is attached for the Examiner's information. See References 1 8, 11 20, 28 and 29.
- 4. In accordance with 37 CFR §1.98(a)(2)(ii), copies of any U.S. patents and patent application publications are not attached.
- 5. An English language Abstract of one or more non-English language reference is attached hereto. See References 11, 14, 16 21, 23 25 and 27.

- 6. A computer-generated English language translation of one or more Japanese Patent Publication cited herein has been obtained from the website of the Japanese Patent Office ([http://www.jpo.go.jp]), and is attached, but has not been reviewed for accuracy. See References 11, 14 and 16 27.
- 7. References 1 3, 12 and 13 correspond to reference 11. References 4 and 15 correspond to reference 14. References 5 and 6 correspond to reference 16. References 7 and 8 correspond to reference 17. References 9 and 10 correspond to reference 19.
- 8. References 23, 25 and 27 are the unexamined publication of references 22, 24 and 26, respectively.

Respectfully submitted,

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JAO:RBI/jtp

Date: August 4, 2006

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
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Sheet 1 of 2

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		US Dept. of Commer		ATTY DOCKET NO. 126785		APPLICATION NO. 10/584,942		
	INFORMA'	TION DISCLOSURE STATEMENT						
	(Us	e several sheets if necessary)		APPLICANTS Susumu NODA et al.				
				FILING DATE July 5, 2006				
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	2	2002/0118923 A1	8/29/2002		WANG et al.			
	3	6,512,866 B1	1/28/2003		FAN et al.			
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	11	JP A 2001-508887	7/3/2001		Japan		х	х
<u> </u>	12	WO 03/077023 A1	9/18/2003		WIPO	·		
	13	WO 98/57207	12/17/1998		WIPO			
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	17	JP A 6-88915	3/29/1994		Japan		х	х
	18	JP A 2004-233941	8/19/200	4	Japan		х	х
	19	JP A 2004-334190	11/25/2004		Japan		х	х
			OTHER D	OCUME	NTS			
Examiner Initials	Cite No.	(Including Author, Title, Date, Pertinent Pages, etc.)						
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	ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /R.P./							
EXAMINER	R /Rhonda Peace/ Date considered							

Date: August 4, 2006

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Sheet 2 of 2 APPLICATION NO. Form PTO-1449 US Dept. of Commerce ATTY DOCKET NO. 10/584,942 PATENT & TRADEMARK OFFICE 126785 (REV. 1/06) (Use several shorts in necessary) **APPLICANTS** Susumu NODA et al. FILING DATE July 5, 2006 U.S. PATENT DOCUMENTS Examiner Cite Document Number Name Date Initials No. FOREIGN PATENT DOCUMENTS With With Examiner Cite English English Date Country Initials Document Number No. Abstract Translation Х JP A 2004-212416 7/29/2004 Japan Х 20 Х JP A 2001-272555 10/5/2001 Х 21 Japan х 8/8/2003 22 JP B2 3459827 Japan JP A 2003-279764 10/2/2003 Х Х 23 Japan 24 JP B2 3334381 8/2/2002 Japan Х Х 25 JP A 8-160259 6/21/1996 Japan Х Х 4/11/2003 Х 26 JP B2 3417373 Japan Х Х 27 JP A 2001-215350 8/10/2001 Japan OTHER DOCUMENTS Examiner Cite (Including Author, Title, Date, Pertinent Pages, etc.) Initials No. 28 Takashi Asano et al., "Optical Add/Drop Filter Using 2D Photonic Crystal Slab -Interference between single defects-," 29p-L-7, p. 1039, 2002. 29 B.S.Song et al., "Optical Add/Drop Filter Using an In-plane Hetero Photonic Crystal," 25p-YA-17, p. 916, 2002. 30 Y. Tanaka et al., "Effects of TM-like Slab Mode on Line-Defect Waveguide in 2D Photonic Crystal Slab," 28a-YN-9, p. 1129 2003. 31 Alongkam Chutinan et al. "Waveguides and waveguide bends in two-dimensional photonic crystal slabs," Physical Review B, Vol. 62, No. 7, pp. 4488-4492, 2000. **EXAMINER** /Rhonda Peace/ Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance Examiner: and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of 2 APPLICATION NO. Form PTO-1449 US Dept. of Commerce ATTY DOCKET NO. PATENT & TRADEMARK OFFICE 10/584,942 126785 (REV. 1/06) INFORMATION DISCLOSURE STATEMENTE (Use several sheets if neces APPLICANTS Susumu NODA et al. FILING DATE July 5, 2006 PATENT DOCUMENTS Examiner Cite **Document Number** Date Name Initials No. FOREIGN PATENT DOCUMENTS With With Cite Examiner Country English English Document Number Date Initials No. Translation Abstract 7/29/2004 х Х JP A 2004-212416 Japan 20 X Х JP A 2001-272555 10/5/2001 Japan 21 8/8/2003 Х 22 JP B2 3459827 Japan Х Х JP A 2003-279764 10/2/2003 Japan 23 Х Х 24 JP B2 3334381 8/2/2002 Japan Х X 6/21/1996 25 JP A 8-160259 Japan 4/11/2003 Х JP B2 3417373 Japan 26 8/10/2001 Х Х 27 JP A 2001-215350 Japan OTHER DOCUMENTS Examiner Cite (Including Author, Title, Date, Pertinent Pages, etc.) Initials No. Takashi Asano et al., "Optical Add/Drop Filter Using 2D Photonic Crystal Slab -Interference between single defects-," 29p-L-7, 28 p. 1039, 2002. 29 B.S.Song et al., "Optical Add/Drop Filter Using an In-plane Hetero Photonic Crystal," 25p-YA-17, p. 916, 2002. Y. Tanaka et al., "Effects of TM-like Slab Mode on Line-Defect Waveguide in 2D Photonic Crystal Slab," 28a-YN-9, p. 1129 30 Alongkam Chutinan et al. "Waveguides and waveguide bends in two-dimensional photonic crystal slabs," Physical Review B, 31 Vol. 62, No. 7, pp. 4488-4492, 2000. DATE CONSIDERED **EXAMINER** /Rhonda Peace/ 02/16/2010 Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance Examiner: and not considered. Include copy of this form with next communication to applicant.

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